

# Abstract

A Littrow grating (1) comprises a multiplicity of parallel diffraction structures (3) succeeding one another periodically. The latter are arranged on a support (2) defining a base area (4). A diffraction structure (3) comprises a blaze flank (5) inclined towards the base area (4) substantially at the Littrow angle ( $\delta$ ). In addition the diffraction structure (3) comprises a counter-flank (6) which forms with the blaze flank (5) at the apex of a diffraction structure (3) an apex angle ( $\alpha$ ) which is less than  $90^\circ$ . The counter-flank (6) comprises at least two substantially plane area sections (7, 8). The latter extend, bordering one another and inclined relative to one another through an angle of inclination ( $\beta$ ), parallel with the extension direction of the diffraction structure (3). Due to the inclination of the at least two area sections (7, 8) relative to one another, the counter-flank (6) exhibits all in all a concave surface viewed from the light incidence side. A Littrow grating (1) of high reflectivity is obtained, which may be achieved with the removal of only a small amount of material at the manufacturing stage.

(Figure 1)